



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/765,263	01/18/2001	William H. Zebuhr	105019-0007	6146

24267            7590            04/10/2002  
CESARI AND MCKENNA, LLP  
88 BLACK FALCON AVENUE  
BOSTON, MA 02210

[REDACTED] EXAMINER

MANOHARAN, VIRGINIA

ART UNIT	PAPER NUMBER
1764	7

DATE MAILED: 04/10/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/765,263	ZEBUHR, WILLIAM H.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Virginia Manoharan	1764	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM  
 THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on 10 December 2001.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) 30-37 is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-29 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.  
 If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All
  - b) Some \*
  - c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
  - a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                           | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ . |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4 . | 6) <input type="checkbox"/> Other: _____ .                                   |

Applicant's election with traverse of Group I, claims 1-29 in Paper No. 6 are acknowledged. The traversal is on the ground(s) that "to the extent that the method defined by claim 3 (sic) can be practiced in a single - effect system... it can be practiced by the evaporation - and - condenser unit that claim 1 defines. Claim 30's paragraph A defines providing a heat exchanger that claim 1's paragraph A defines. Claim 1's evaporation - chamber irrigation system is for performing the type of irrigation that claim 30's paragraph B performs and claim 1's paragraph C defines a vapor guide that directs vapor in the manner that claim 30's paragraph C defines...".

This is not found persuasive because while the irrigation system of claim 1 is for performing the method defines in claim 30, as argued, however, as previously indicated in the restriction requirement, there are other apparatus that can perform the method of claim 30. Furthermore, the search and examination of the entire application present also undue burden. The claimed "irrigation rate" for example are taken into consideration in claim 30 method claim but has no patentable significance in the apparatus of claim 1. Other classification areas e.g. class 137 is a mandatory search for Group II invention but is not required to be searched for Group I invention. Moreover, the vapor guide in claim 1 can direct the vapor into e.g., a demister and not necessarily into the condenser as defined in claim 30.

The requirement is still deemed proper and is therefore made FINAL.

Applicant should update the related application indicated at page 1, i.e., giving its application number or patent number, filing date and other relevant informations.

Art Unit: 1711

Claims 1-29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. The inconsistent used of terminology in the claims improper. For example.

1. "at least one condensation chamber" recited in lines 2-3 of claim 1, as opposed to condensation chamber" recited in line 4, of claim 1;
2. "at least one evaporation chamber" in lines 3-4, as opposed to "said evaporation chamber in line 7. The phrase – at least one –should be inserted throughout the claims.

b. The recitation in claim 1 A of "heat passes from the condensation chamber to the heat exchanger ..."(underlining supplied) provides for ambiguity.

It would presuppose from the initial recitation of claim 1 that the heat exchanger includes the evaporation and the condensation chamber.

c. In claim 6, B), "a plurality of said evaporation chambers" should be -- the plurality of said evaporation chambers-- as said plurality is already initially recited in claim 6, A).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 1711

Claims 1-5, 10-12, 17-20 and 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anyone of GB '085, Hickman, Shafronovsky et al. or Ramshaw et al.

GB '085 discloses a process for distilling a liquid, an evaporator-and-condenser unit comprising:

A heat exchanger that includes heat-transfer surfaces, forming at least one condensation surface (370) and at least one evaporation surface (390), by which heat passes from the at least one heat one condensation chamber to the heat exchanger; a nozzle (388), corresponding to the claimed irrigation system; and a vapor guide (392) defining a vapor path along which it directs to the at least one condensation chamber vapor thereby produced in the at least one evaporation chamber as broadly claimed in claim 1. See e.g., the claims at pages 6-8. Anyone of Hickman, Shafronovsky et al or Ramshaw et al discloses basically similar structural elements as above. See the claims of the above references.

The apparatus of anyone of the above references differs from the claimed invention in that claim 1, for example, recites the limitation that the "irrigation system whose rate of irrigation of each said evaporation system has respective average irrigation rate and repeatedly reaches a respective peak irrigation rate that is at least twice, the average irrigation rate thereof".

However, said limitation, is deemed not to constitute a patentable distinction because it is more directed to "process" rather than to apparatus to which the claims are directed. A process limitation is not the basis for patentability of an apparatus claim.

Art Unit: 1711

Claims 2, 4, 17-18 are not directed to any elements of an apparatus, and accordingly cannot be distinguished from the prior art in the structural sense.

Claims 6-9, 13-16, 21-23 and 26-29 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to V. Manoharan whose telephone number is (703) 308-3844. The examiner can normally be reached on Tuesday-Friday from 7:30 a.m. to 6 p.m. and on alternate Mondays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ms. Marian Knode can be reached on (703) 308-4311. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9310.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0651.

V. Manoharan/dh  
April 9, 2002

*KM* *DH*  
VIRGINIA MANOHARAN  
PRIMARY EXAMINER  
ART UNIT 138 (ZL4)  
AF(9/02)